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WHAT IS LACKING, STATEMENT ON SENSORY DEPRIVATION.

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THIS PAPER, WHICH ANNOUNCES THE THEME OF A SEMINAR ON THEORIES OF LANGUAGE AND LEARNING, QUESTIONS THE VIEW THAT A CHILD'S POOR SCHOOL PERFORMANCE DERIVES FROM AN IMPOVERISHED SENSORY EXPERIENCE. A DEPRIVED TROPICAL ENVIRONMENT IS DEPICTED TO CAST DOUBTS ON THIS THEORY. A BIBLIOGRAPHY OF THE EFFECTS OF SENSORY DEPRIVATION IS INCLUDED. THIS DOCUMENT WAS PREPARED FOR A SEMINAR ON "THEORIES OF LANGUAGE AND LEARNING." (AF)

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What is Lacking?
Statement on Sensory Deprivation

Theme of Seminar:
Theories of Language and Learning

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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There has been a suggestion that children of the dark heart of our poverty areas have tendencies towards what is called 'cultural deprivation.' In one sense to consider that a child, any human being growing up in a society, could be culturally deprived is ridiculous.

Man and culture go together and it is difficult to imagine one without the other. To speak of having less or more, or deficient amounts of culture, is like attempting to qualify uniqueness. However, this topic has been well discussed and, in general, the academic world has assented to this poor use of words; there has been general agreement that cultural deprivation will mean experience that does not suit the individual for the successes that the school and its matrix value.

More sophisticated commentators have sometimes suggested that children of the rotting core of civilization are deprived in a facet that is most detrimental to their school success, namely, sensory deprivation. Linguistic deprivation has also been suggested as the type of deficiency best attributed to these children.

Others have considered linguistic deprivation as merely part of inadequacy of symbolizing--or as part of the sensory or larger cultural deprivation.' Cultural, linguistic and sensory deprivation are all in one sense inappropriate terms and in another somewhat useful metaphors.

The topic to which we will confine ourselves eventually will be the large question of the relationship of language to thinking and learning; however, here it is the topic of sensory deprivation to which I would like to address our attention.

In the opinion of some,a child's poor performance in formal schooling derives from impoverished sensory experience with linguistic deprivation seen as the result of the larger sensory deprivation. Do children from ghettos and slums experience less quantity or quality of experience with their eyes, ears, fingers, noses?

Experiments with creatures deprived of sensory stimulation are used as bases for arguments concerning the relationship among poverty deprivation sensory impoverishment and lower learning potential. Animals and humans deprived of change of stimuli, to put it mildly lose their minds. The connection with children and learning sounds reasonable; if nothing much is coming into the mind, then it seems reasonable that there is little to be done in the central storage system. Thus, little activity, little development, etc., etc. But does 'nothing much' come in? Are there optimal quantities of materials that can be processed by the senses? Are all the senses equal in their potentiality for influencing the central storage system? Is sheer quantity of stimuli the crucial factor or are there qualitative factors which weigh the stimuli? So the questions could continue.

Does one second's touch of a burning match have perhaps three times the sensory enrichment value of a 60 seconds hold on a plastic ball? Does one vivid sense second of touch equal in sensory enrichment value the equivalently vivid sense second of sight, hearing or smelling? Is there a point when there is so much noise (in the sense of unordered bombardment of stimuli of any sense) that the enrichment value for the SEV* is turned off, deactivated?

* Sensory Enrichment Value

We could continue speculating about these matters; however, I have a simpler point to make in a vignette which relates to a recent visit to a slum in a semi-jungle-like environment. This incident is not taken from the heart of darkest cities, which in sheer susceptibility to degradation is infinities of degrees more dark than a tropical rain forest. Because the story does not arise from an urban setting its relevance to our problems above is perhaps less direct.

The rainy season was beginning a little early. The effects were similar to those I have experienced elsewhere in the tropics. The sky, of which there always seems so much when encountered from a small island, was a drama of tropical rainburst clouds and clear sun-brilliant blue. Hence, when it rained, it poured and was cool, and when it shone, it sweltered. Throughout the day the competing aspects of the sky played out their roles to the discomfort of those below. Had it rained or blazed one or the other, the consistent effects could have been accommodated. However, I repeat, the rainy season was beginning spasmodically early, and those below experienced the discomfort by an undecided nature.

In the capitol, Agana, these discomforts involved chameleon-like change from a general feeling of dampness and a specific wetness to steamy drying, to a sweltering after-heat. Dripping umbrellas added their accumulated moisture to the close air around each individual; wet shoes hardened again into a substance like leather.

Fortunately, on the day my story occurred I was enroute out of Agana at 2:30 when the tenth deluge for the day was being enacted. Down the coast and

up towards the hills in the vicinity of Agat where our destination lay, the rain had already passed and the after effects were being felt by man and beast. It was somewhat after three by the time we parked the car at a turning of a road that looked like it might be a good site for a future quiet crescent of a wealthy suburban subdivision. The views were of those velvet folded tropical hills and the usual, but never believable, play of subtleties across the green-blue range of the marine color spectrum.

The hovel, to which we were directed, however, had less of the advantages of such views; it was steeply down the side of the hill around whose crest looped the road we had followed. The shack was some hundred feet down within the scrub. These hundred feet put it at the base of some trees whose upper leaves touched the wheel level of the car above.

By now the after-tones of the last rain were impinging on all my senses. In that special light that separates objects and their qualities, each sense had its range of perception elaborated; at least, the atmosphere seemed to intensify the sights, sounds, smells and touch. The objects to see, touch, smell, even taste were dramatically vivid in the moist and lambent atmosphere in the gold light filtered through the trailing remnants of the storm clouds. Leaves added their filtering effect and then dappled the wet soil where rotted and reeked fragments of food, clothing and general products of civilization around this home. I should hardly use that word to describe the location of the woman and her nine children living with her fourth man. The conditions combined the worst of civilization in a location where native living would have been a more intelligent alternative.

Certainly there is an abundance of interest for any person, much less a child, in the things to handle, smell, see in a refuge pile. One of my anthropological colleagues has been carrying out archaeological investigations with his students in the local dump. I can appreciate the value of such activities. There were around this house things to rub together and to bang, to squash between hands and to squish through toes. There were a seeming infinity of those little tags from the zip open cans; there were buttons, shells of the Achatina fulica, the giant African snail; there were single new unused shoes given by a social worker; there were leaves, grubs, berries from trees, broken toys, old sweaters, baby buggy wheels. There were riots of color, even occasional fragments of views of the sea, the velvet green of the hills and a flag at the pinnacle of one hill, as distant as the rewards of the society it represented.

The path through the foliage was slippery from the rain and the remnant of the family and nature. The fecund air was intoxicating. There was danger of slipping on matter compounded from wet soil and the scraps of objects cluttering the path. I first saw the structure in which the family lived with less surprise than its appearance warranted. I had been long enough on tropical islands to become familiar with the open structure. This cross between open living and an urban dwelling did not surprise me. Nevertheless, I did wonder how nine people could live in such a small space.

None of the children was visible. The mother, it turned out, was elsewhere and did not appear during the whole hour and three quarters we were there. We entered the doorless opening at the top of six wooden stairs and stepped

over the children that lay asleep on the six foot wide bare floor. There were two beds without mattresses. Under these a child was asleep like a small puppy. On one was a three month old human being. I expect by using 'human being' I intend to give an impression of my distress at seeing any creature so tormented. Michael was on a heap of rags in the sag of the second wire mattress, asleep at first, then awake and crying. In that temperature and humidity I would suspect he could have done without rags attached to him as clothes but he had the remnants of a zip-up sleeper. The legs were tied around his stomach revealing his scarlet rawness underneath. At the neck the sleeper fitted like ironic fate fulfilling expectations where it ought not have. At the neck and into his face the original brown skin was peeled, scaled, raw and red. A six year old quietly fetched the plastic baby bottle such as we would see at any drugstore. This object had rolled under a filthy cupboard. The little mother put the baby's milk powder into the bottle and made his drink. Meanwhile, a fifteen month old baby had begun to cry, then the little horde of children awoke and moved outside.

During the whole time I tried to observe as much detail as I could. I walked along with some of the children and was shown the 'bitey insects,' the paths through the trees, the animals in the neighborhood, the houses, the flag on the hill top, the water in the distance. I made rings and bangles out of the zip can openers. The two and a half year old wanted the berries he pointed at and the leaves he cried for.

There was a great quantity of noises and sticking things in mouths and touchings and lookings. During all the goings on, all the touchings, seeings,

listenings, smellings, tastings I mused that there was no lack here of sensory stimulation--no deprived state if the quantity of stimuli that were impinging upon eye, ear, hand were considered. Color, shape, size, texture, things animate and inanimate, perfume, odious, pungent, delicate abounded.

Obviously the conditions that I have been discussing are not rare. In the alternative ways that man lives, much worse conditions can be seen and imagined. Obviously, also, living in the semi rural atmosphere of a favorable warm climate has advantages that urban slum life does not. However, social and philosophical issues are not the direct focus of our attention. Nor are the comments that I am inclined to make regarding the unfortunate results of the attenuated advantages of civilization, by the time such advantages reach the level of human life as exist in this Guamanian hut. At this low level, the dim influence of the distant benefits suggests a Plotinian emanation situation. Such an analogy is suggested by the dead rotting scraps of the western world around the dwelling; the hut itself was an attempt to use civilization's materials; the clothes, that had been better not worn at all, molded and reeked as they soaked in a week old tub of washing water. However, again, these are not our topics.

The questions I asked myself were those I pose as the theme of this seminar. If the child's senses and what they receive have something to do with deprivation and getting ready for formal learning, what was the deficiency or impediment in the filter of these children playing around this hovel? Is the processing of the incoming stimuli inefficient or is the filter which

allows these stimuli to enter impaired? How else could we recognize the existence of the mass of sensory data around these children and yet hold to some theory relating cultural deprivation, learning and sensory stimulation?

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